

Индивидуальная работа
по физике
ученицы 9 "А" класса
Жуковой Елены.

N1.

Dano:

$$l = 1,5 \text{ p.g. mm}$$

$v_{\text{konca razobor}} < \dots$

Peremennye:

$$F = \frac{2\pi R}{T} \Rightarrow v = \frac{2\pi R}{T}$$

$$\frac{R_{\text{min}}}{R_{\text{za}}} = 1,5$$

$$T_{\text{min}} = 1 \text{ rac}, T_{\text{zae}} = 12 \text{ rac}$$

$$\frac{v_{\text{min}}}{v_{\text{zae}}} = \frac{2\pi R}{T_{\text{zae}}} \cdot \frac{T_{\text{zae}}}{2\pi R_{\text{min}}} = \frac{R_{\text{min}} T_{\text{zae}}}{R_{\text{zae}} T_{\text{min}}} = \frac{3 \cdot 12 \text{ rac}}{2 \cdot 1 \text{ rac}} = 18 \text{ raz.}$$

N2.

Dano:

$$v_0 = 72 \text{ km/h}$$

$$t_0 = 10 \text{ c}$$

$S = ?$

$v_{\text{ep}} = ?$

Peremennye:

$$v_k = v_0 - at_0 = 0$$

$$a = \frac{v_0}{t_0}$$

$$S = \frac{v_2 t_0}{2} = 100 \text{ m}$$

$$t_1 = \frac{t_0}{2} \Rightarrow S_1 = v_0 t_1 - \frac{at_1^2}{2} = \frac{3v_0 t_2}{5}$$

$$v_{\text{ep}} = \frac{S_1}{t_1} = \frac{3v_0}{4} = 54 \text{ km/h}$$

N3

Dano:

$$m = 1 \text{ kg}$$

$$\frac{1}{a} = \frac{Q^2}{\dots}$$

$$Q = Q_1 + Q_2$$

$$Q_1 = cm(t_2 - t_1) = 140 \cdot 1(327 - 0) = 45780 \text{ Jne}$$

$$Q_2 = \lambda \cdot m = 2,5 \cdot 10^4 \cdot \frac{1}{2} = 12500 \text{ Jne}$$

$$Q = 45780 \text{ Jne} + 12500 \text{ Jne} = 58280 \text{ Jne}$$

№4.

Дано:

Решение:

Схема

I_{12} ?

$$R = R_1 + R_2$$

$1 + 1 = 2 \text{ Ом}$ - беремие утасмон

$2 + 2 = 4 \text{ Ом}$ - кинемии утасмон.

$$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$$

$$\frac{2 \cdot 2}{2+2} = 1 \text{ Ом}$$

$$\frac{4 \cdot 1}{4+1} = 0,8 \text{ Ом}$$

$$0,8 + 2,8 = 3,6 \text{ Ом}$$

$$I = \frac{U}{R} = \frac{36 \text{ В}}{3,6 \text{ Ом}} = 10 \text{ А}$$